

**Work Order ID 85072****\*85072\***

Page 1

Friday, June 01, 2012 10:54:37 AM

Item ID: D4151-7

Accept

**\*N900040100\***Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: Fwd Eyebolt Receiver (Upper)

Start Date: 6/1/2012 Start Qty: 30.00

**\*30\***

Cust Item ID:

Required Date: 6/13/2012 Req'd Qty: 30.00

**\*30\***

Customer:

Reference:

*12-06-01*

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start **\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop **\*NR2\***Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

Draw Nbr

Revision Nbr

D4151

C

100

0.00

**\*100\***

Bandsaw

Jeaspa Bandsaw

Memo

Cut blank to 2.960" long

0.00

*FK 12/06/01**30**0*

110

0.00

**\*110\***

HAAS I

HAAS CNC vertical machine #1

Memo

1-MILL as per folio FA952 &amp; dwg,

FOLIO REV: CDWG REV: C

2-Deburr as required

0.00

*FK 12/06/01**10/12/06/01**27**3**30**0*

# Work Order ID 85072

\*85072\*

Page 2

Friday, June 01, 2012 10:54:37 AM

Item ID: D4151-7 Accept \*N900040100\* Setup Start \*NS1\*  
 Revision ID: Stop \*NS2\*  
 Item Name: Fwd Eyebolt Receiver (Upper)  
 Start Date: 6/1/2012 Start Qty: 30.00 \*30\* Cust Item ID:  
 Required Date: 6/13/2012 Req'd Qty: 30.00 \*30\* Customer:  
 Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start \*NR1\*  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120 *120* QC Quality Control	QC2- Inspect parts off machine FAI/FAIB  Memo	0.00  0.00				27 36	3 0		
			F.K 12/06/01						
			PO/R 12/06/04						
130 *130* QC Quality Control	QC8- Inspect parts - second check  Memo	0.00  0.00				27	3 0		
			B.a 12/06/07						
140 *140* Packaging Packaging	Identify as per dwg & Stock Location: <u>SI 99</u>  Memo	0.00  0.00				27			545 12/06/08

# Picklist Print

Page 1

Friday, June 01, 2012 10:54:36 AM

Work Order ID: 85072

Parent Item: D4151-7

Start Date: 6/1/2012

Required Date: 6/13/2012

Parent Item Name: Fwd Eyebolt Receiver (Upper)

Start Qty: 30.00

Required Qty: 30.00

Comments: IPP REV:A NEW ISSUE 10-07-22 JLM VERIFIED BY:DD IPP Rev:B 11.01.21 as per dwg  
revC DD verf:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M303B2.000X1.750 303 BAR 2" X 1.750"		Purchased	No			100	f	29.2720	0.26	8.2105263			

Location

Loc Qty

Loc Code

MAT050

29.271963

118535

3.005263

121766

3.1

121921

23.1667

~~11095~~ 2.737  
~~2019~~ 5.474 F.K 12/06/01

<b>DART AEROSPACE LTD</b>	<b>Work Order:</b>	82966
<b>Description: Fwd Eyebolt Receiver (Upper)</b>	<b>Part Number:</b>	D4151-7
<b>Inspection Dwg: D4151      Rev: C</b>		<b>Page 1 of 1</b>

## FIRST ARTICLE INSPECTION CHECKLIST

[illegible]

Measured by: F.k	Audited by: B.A	Preliminary Approval:
Date: 12/06/01	Date: 12/06/07	Date:

Rev	Date	Change	Revised by	Approved
A	10.08.04	New Issue	KJ	
B	10.08.25	Tolerance revised for dimension 0.800	KJ	
C	11.07.26	Dimensions revised per Dwg Rev C	KJ	

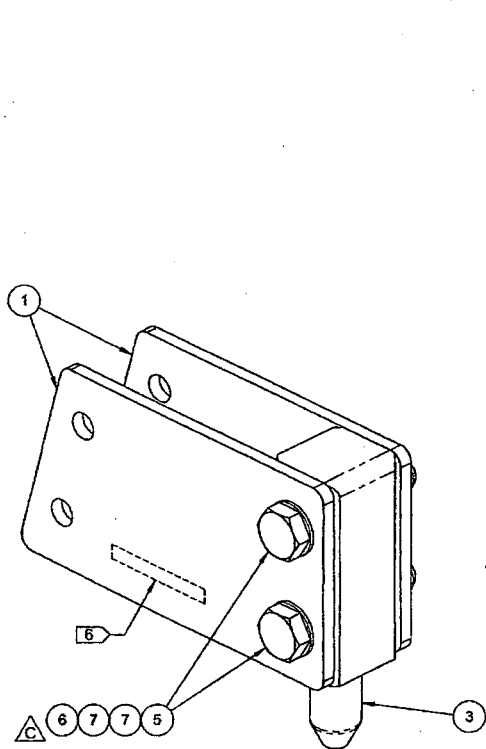
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D4157 PAR #: \_\_\_\_\_ Fault Category: Machining NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

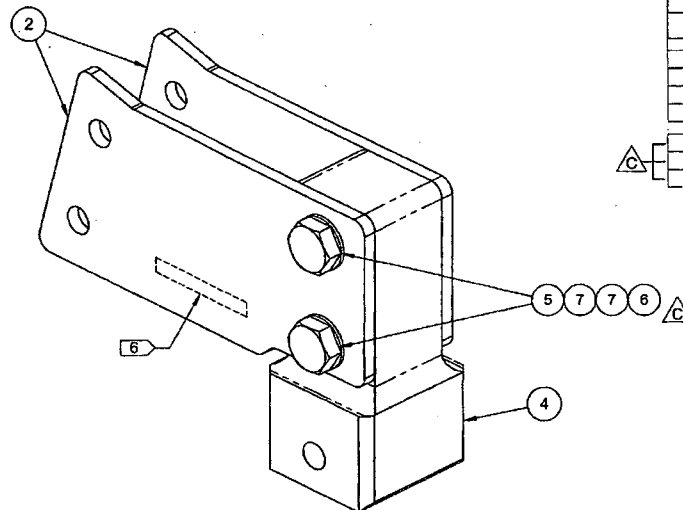
Resolution: SCRAP Disposition: SCRAP QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
12.06.06	110	BORE IS OFF-CENTER ON 3 PIECES. R.L. inaccurate setup. operator error	CP 12.06.06	SCRAP. BASED ON FEEDBACK FROM M.B.; POTENTIAL FIT ISSUE.	PD 12/06/07	S 12/06/07	CP 12.06.06 08/10/12	S 12/06/07

NOTE: Date & initial all entries



**D4151-041 BASKET FWD HARDPOINT ASSY (LOWER)**



**D4151-043 BASKET FWD HARDPOINT ASSY (UPPER)**

- NOTES:**
- 1) MATERIAL: N/A
  - 2) FINISH: NONE
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
  - 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D4151-04X" USING FINE POINT PERMANENT INK MARKER
  - 7) WEIGHT:
    - D4151-041 = 0.88 lbs
    - D4151-043 = 1.17 lbs

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 82916

*10/2-04-10*

ITEM	QTY -041	QTY -043	P/N	DESCRIPTION
	X		D4151-041	BASKET FWD HARDPOINT ASSY (LOWER)
		X	D4151-043	BASKET FWD HARDPOINT ASSY (UPPER)
1	2		D4151-1	LOWER HARDPOINT PLATE
2		2	D4151-3	UPPER HARDPOINT PLATE
3	1		D4151-5	FWD BASKET INSTL STUD (LOWER)
4		1	D4151-7	FWD EYEBOLT RECEIVER (UPPER)
5	2	2	AN4C13A	BOLT
6	2	2	MS21043-4	NUT
7	4	4	NAS1149C0432R	WASHER

RELEASED  
2011-01-08  
*MM*

C	AN4 HARDWARE WAS AN3 (B6-1, C3-1 & D3-1); Ø0.252 WAS Ø0.191 (C5-2, D1-2); TIGHTENED TOL ON 1.000 DIM (C5-2, D1-2, C7-3, C3-3); Ø0.250 WAS Ø0.191 (C6-3, B4-3); 1.83 WAS 1.75 (C1-2); 2.84 WAS 2.78 (B3-3) AND 1.86 WAS 1.80 (C1-3) TO PRESERVE 1.5SD. REASON: SEE D407-797 DESIGN JOURNAL.	MB	10.12.14
B	ADDED D4151-5/-7 (SHT 3); D4151-5 WAS D3911-1 (ZN B6-1 & D3-1); D4151-7 WAS D3911-3 (ZN C4-1 & D3-1) ITEMS #5, 6 & 7 REPLACE MS20015-4M20 (ZN C5-1, D3-1 & B5-1); Ø0.181 2 PL REPLACES Ø0.129 3 PL (ZN C5-2); Ø0.191 2 PL REPLACES Ø0.129 4 PL (ZN D1-2). REASON: SEE TR-D350-607-2 REV. B.	MB	10.07.05
A	NEW ISSUE	MB	10.06.22
REV.	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	10.12.14		

**DART AEROSPACE LTD**

HAWKESBURY, ONTARIO, CANADA  
DRAWING NO. **D4151** REV. C  
SHEET 1 OF 3  
TITLE **BASKET FWD HARDPOINT** SCALE NTS  
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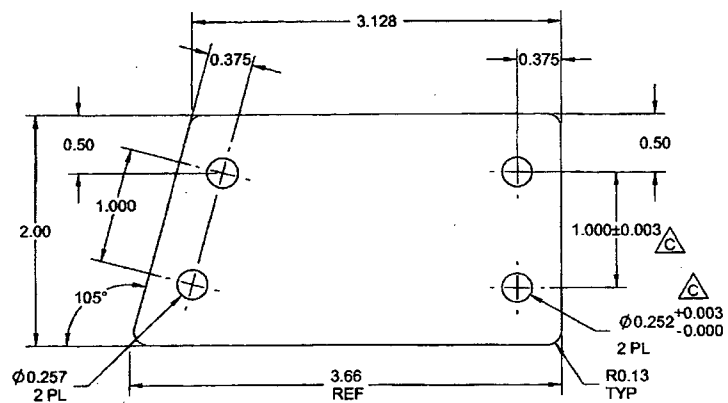
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

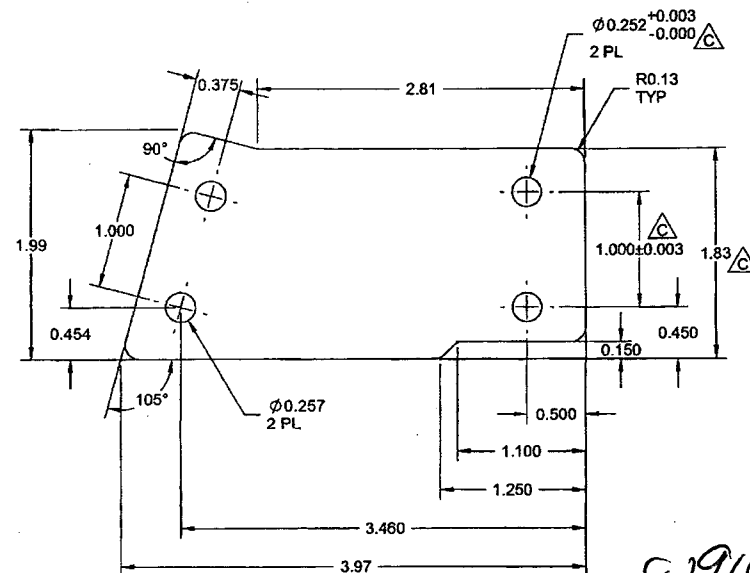
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



0.125  
REF

**D4151-1 LOWER HARDPOINT PLATE**



0.125  
REF

**D4151-3 UPPER HARDPOINT PLATE**

82916

**NOTES:**

1) MATERIAL: 303/304/316 STAINLESS STEEL SHEET ANNEALED 2B, 0.125 THK  
PER MIL-S-5059 OR AMS 5513/5524 OR ASTM A240 OR ASME SA240  
REF. DART SPEC. M304S11GA OR M303S11GA

2) FINISH: NONE

3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED

4) UNITS: INCHES UNLESS OTHERWISE NOTED

5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX

6) IDENTIFICATION: IDENTIFY AT ASSEMBLY

7) WEIGHT:

- D4151-1 = 0.24 lbs

- D4151-3 = 0.23 lbs

**RELEASED**  
2011-01-18  
JMD

DESIGN		<b>DART AEROSPACE LTD</b>	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED	SC	DRAWING NO. <b>D4151</b>	REV. C
MFG. APPR.			SHEET 2 OF 3
APPROVED	JMD	TITLE <b>BASKET FWD HARDPOINT</b>	SCALE NTS
DE APPR.			
DATE	10.12.14		

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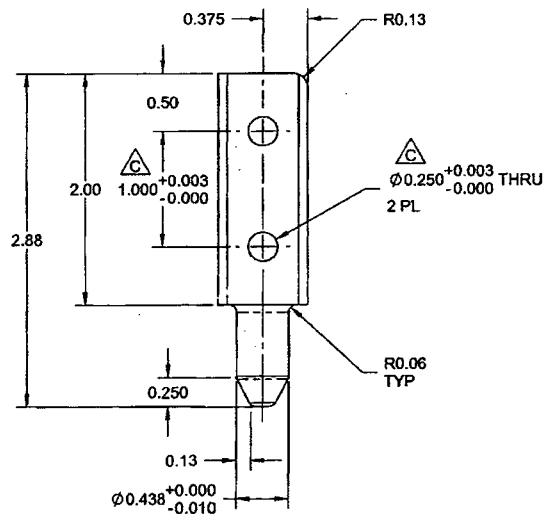
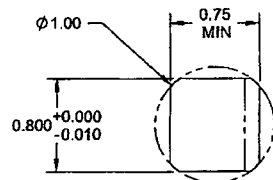
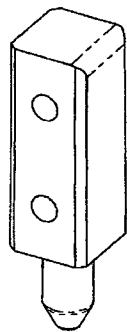
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

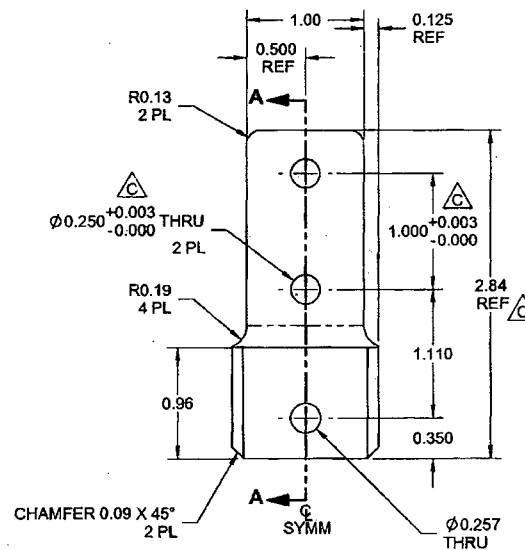
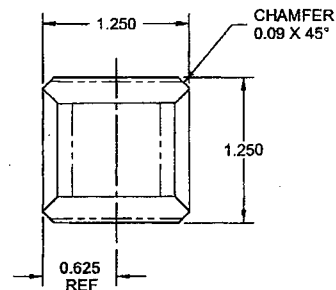
Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

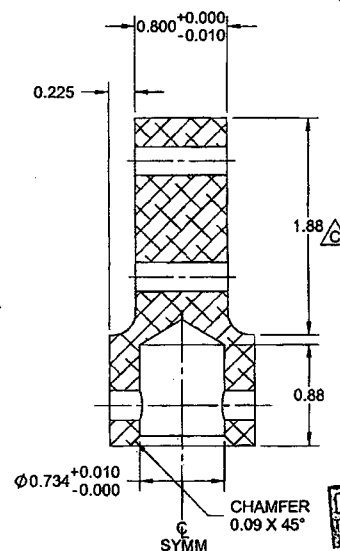
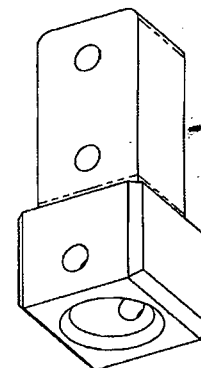


**D4151-5 FWD BASKET INSTL STUD (LOWER)**



**D4151-7 FWD EYEBOLT RECEIVER (UPPER)**

82916



**SECTION A-A**

**RELEASED**  
R 2011-01-30  
**RELEASED**

- NOTES:**
- 1) MATERIAL -5: 303/304/316 STAINLESS STEEL ROUND BAR, PER ASTM A276 OR ASTM A582 PER DART SPEC M303R OR M304R
  - 7: 303/304/316 STAINLESS STEEL BAR, PER ASTM A276 OR ASTM A582 PER DART SPEC M303B OR M304B
  - 2) FINISH: NONE
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
  - 6) IDENTIFICATION: IDENTIFY AT ASSEMBLY
  - 7) WEIGHT -5: 0.36 lbs  
-7: 0.70 lbs

DESIGN		<b>DART AEROSPACE LTD</b>	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO	REV. C
MFG. APPR.		<b>D4151</b>	SHEET 3 OF 3
APPROVED		TITLE	SCALE
DE APPR.		<b>BASKET FWD HARDPOINT</b>	NTS
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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries